

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM
QUESTIONNAIRE

Iowa Agreement State Program

Reporting Period: August 11, 2017 - June 24, 2022

Note: If there has been no change in the response to a specific question since the last IMPEP questionnaire, the State or Region may copy the previous answer, if appropriate.

A. GENERAL

1. Please prepare a summary of the status of the State's or Region's actions taken in response to each of the open recommendations from previous IMPEP reviews.

The 2017 IMPEP review team did not identify any recommendations for the Iowa Radioactive Materials Program.

B. COMMON PERFORMANCE INDICATORS

I. Technical Staffing and Training

2. Please provide the following organization charts, including names and positions:

- (a) A chart showing positions from the Governor down to the Radiation Control Program Director;

See attached PDF organizational chart.

- (b) A chart showing positions of the radiation control program, including management; and

See attached PDF organizational chart.

- (c) Equivalent charts for sealed source and device evaluation, low-level radioactive waste and uranium recovery programs, if applicable.

Not applicable for the State of Iowa.

3. Please provide a staffing plan, or complete a listing using the suggested format below, of the professional (technical) full-time equivalents (FTE) applied to the radioactive

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materials program by individual. Include the name, position, and, for Agreement States, the fraction of time spent in the following areas: administration, materials licensing & compliance, emergency response, low-level radioactive waste, uranium recovery, other. If these regulatory responsibilities are divided between offices, the table should be consolidated to include all personnel contributing to the radioactive materials program.

If consultants were used to carry out the program's radioactive materials responsibilities, include their efforts. The table heading should be:

NAME	POSITION	AREA OF EFFORT	FTE%
Angela Leek	Chief	Administration	20%
Randal Dahlin	Health Physicist 3	Materials Licensing & Compliance	80%
Stuart Jordan	Health Physicist 2	Materials Licensing & Compliance	70%
Derek Elling	Health Physicist 2	Materials Licensing & Compliance	80%
Chris Christensen	Health Physicist 2	Materials Licensing & Compliance	100%

4. Please provide a listing of all new professional personnel hired into your radioactive materials program since the last review, indicate the date of hire; the degree(s) they received, if applicable; additional training; and years of experience in health physics or other disciplines, as appropriate.

Derek D. Elling, Health Physicist 2, hire date September 1, 2017

Bachelor of Science degree in Physics and Bachelor of Science degree in Mathematics from Drake University May 2001

Navy Nuclear Engineering Officer 2003-2006

Chris K. Christensen, Health Physicist 2, hire date November 29, 2021

Bachelor of Science degree in Nuclear Medicine Technology from University of Iowa May 1992

Master of Health Administration from St. Francis University, May 1998

Certified Nuclear Medicine Technologist (1992-1999)

5. Please list all professional staff who have not yet met the qualification requirements for a radioactive materials license reviewer or inspector. For each, list the courses or equivalent training/experience they need and a tentative schedule for completion of these requirements.

Derek D. Elling, HP2 is a qualified radioactive materials license reviewer and inspector. He has attended all NRC core courses.

In addition, Mr. Elling has attended the following NRC “non-core” courses:

H-130S – Environmental Monitoring and Air Sampling for Radioactive Materials

H-130L – Environmental Monitoring and Air Sampling for Radioactive Materials

H-121S – MARSSIM

H-314 – Safety Aspects of Well Logging (Scheduled to attend in October 2022)

Chris K. Christensen, HP2 is not qualified radioactive materials license reviewer and inspector. He has attended the following NRC core courses.

G-108 – Inspection Procedures

G-109 – Licensing Procedures

G-205 – Root Cause Workshop

H-117S – Introductory Health Physics Self-Study Course (In Progress)

6. Identify any changes to your qualification and training procedure that occurred during the review period.

No changes in initial qualifying and training procedure other than adjusting to NRC on-line or "self study" courses. Fully qualified staff independently track refresher training from various resources to include a minimum 24 hours is completed in a cycle of 24 months in accordance to STC-15-069 dated September 1, 2015. Trainings are reviewed and approved by a supervisor

7. Please identify the technical staff that left your radioactive materials program during the review period and indicate the date they left.

None

8. List any vacant positions in your radioactive materials program, the length of time each position has been vacant, and a brief summary of efforts to fill the vacancy.

None

9. For Agreement States, does your program have an oversight board or committee which provides direction to the program and is composed of licensees and/or members of the public? If so, please describe the procedures used to avoid any potential conflicts of interest.

No

II. Status of Materials Inspection Program

10. Please identify individual licensees or categories of licensees the State is inspecting less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800 and explain the reason for the difference. The list only needs to include the following information: license category or licensee name and license number, your inspection interval, and rationale for the difference.

The State is not inspecting any licensee less frequently than called for in NRC's Inspection Manual Chapter (IMC) 2800.

11. Please provide the number of routine inspections of Priority 1, 2, and 3 licensees, as defined in IMC 2800 and the number of initial inspections that were completed during each year of the review period.

The numbers below reflect inspections that will have been completed by May 31,

Inspection Type	Number Completed
Priority 1	30
Priority 2	36
Priority 3	43
Initial	4

12. Please submit a table, or a computer printout, that identifies inspections of Priority 1, 2, and 3 licensees and initial inspections that were conducted overdue.

Not applicable. The State of Iowa does not have nor have we had any overdue inspections during this review period.

At a minimum, the list should include the following information for each inspection that was conducted overdue during the review period:

- (1) Licensee Name
- (2) License Number
- (3) Priority (IMC 2800)
- (4) Last inspection date or license issuance date, if initial inspection
- (5) Date Due
- (6) Date Performed
- (7) Amount of Time Overdue
- (8) Date inspection findings issued

13. Please submit a table or computer printout that identifies any Priority 1, 2, and 3 licensees and initial inspections that are currently overdue, per IMC 2800. At a minimum, the list should include the same information for each overdue inspection provided for Question 12 plus your action plan for completing the inspection. Also include your plan for completing the overdue inspections.

Not applicable.

14. Please provide the number of reciprocity licensees that were candidates for inspection per year as described in IMC 2800 and indicate the number of reciprocity inspections of candidate licensees that were completed each year during the review period.

Year	Candidates for Inspection	Inspected
August 11, 2017 to year end	Priority 1, 2 or 3: 3	Priority 1, 2 or 3: 0
2018	Priority 1, 2 or 3: 9	Priority 1, 2 or 3: 2
2019	Priority 1, 2 or 3: 9	Priority 1, 2 or 3: 2
2020	Priority 1, 2 or 3: 11	Priority 1, 2 or 3: 1
2021	Priority 1, 2 or 3: 12	Priority 1, 2 or 3: 1
2022 year to date	Priority 1, 2 or 3: 10	Priority 1, 2 or 3: 0

III. Technical Quality of Inspections

15. What, if any, changes were made to your written inspection procedures during the reporting period?

No changes were made during the reporting period.

16. Prepare a table showing the number and types of supervisory accompaniments made during the review period. Include:

Inspector	Supervisor	License Category	Date
Randal Dahlin	Angela Leek	Research and Development	7-31-18
Randal Dahlin	Angela Leek	Medical – Therapeutic	8-8-19
Randal Dahlin	Angela Leek	Medical – Diagnostic	11-9-21
Stuart Jordan	Angela Leek	Industrial Radiography	7-31-18
Stuart Jordan	Angela Leek	Medical – Diagnostic	10-8-19
Stuart Jordan	Angela Leek	Medical - Therapeutic	11-10-21
Derek Elling	Angela Leek	Portable Gauge	8-27-19

17. Describe or provide an update on your instrumentation, methods of calibration, and laboratory capabilities. Are all instruments properly calibrated at the present time? Were there sufficient calibrated instruments available throughout the review period?
- The Bureau maintains Ludlum, model 2241-3; Ludlum, model 2241-2; Ludlum, model 14C; Canberra, Ultra Radiacs; and Canberra, model MCB2 radiation survey instruments. These instruments are calibrated each May and November. These calibrations were performed by the Iowa Department of Homeland Security and Emergency Management (Iowa RAM license number 0141-1-77-CD) calibration shop until 2021, after by the Iowa State University (Iowa RAM license number 0014-1-85-AAB). BRH also possesses a Ludlum, model 12-4 “REM Ball” that is returned to Ludlum when calibration is required. BRH also possesses Thermo Electron, Canberra Inspector1000 and BNC model 945 SAM III isotope identifiers. All instruments are properly calibrated and the Bureau has had sufficient instruments throughout the review period.**

IV. Technical Quality of Licensing Actions

18. How many specific radioactive material licenses does your program regulate at this time?

The Bureau currently regulates 130 specific radioactive material licenses.

19. Please identify any major, unusual, or complex licenses which were issued, received a major amendment, were terminated, decommissioned, submitted a bankruptcy notification or renewed in this period.

None.

20. Discuss any variances in licensing policies and procedures or exemptions from the regulations granted during the review period.

See COVID Impact/Adjustment document.

21. What, if any, changes were made in your written licensing procedures (new procedures, updates, policy memoranda, etc.) during the reporting period?

See COVID Impact/Adjustment document.

22. Identify by licensee name and license number any renewal applications that have been pending for one year or more. Please indicate why these reviews have been delayed and describe your action plan to reduce the backlog.

Not applicable.

V. Technical Quality of Incident and Allegation Activities

23. For Agreement States, please provide a list of any reportable incidents not previously submitted to NRC (See Procedure SA-300, *Reporting Material Events*, for additional guidance, OMB clearance number 3150-0178). The list should be in the following format:

All incidents during this reporting period were reported to the NRC via the NRC Operations Center when required or directly to NMED.

24. Identify any changes to your procedures for responding to incidents and allegations that occurred during the period of this review.

Not applicable, no changes have occurred.

C. **NON-COMMON PERFORMANCE INDICATORS**

Legislation, Regulations and Other Program Elements (formerly Compatibility Requirements)

25. Please list all currently effective legislation that affects the radiation control program. Denote any legislation that was enacted or amended during the review period.

Iowa Code Chapters 17A, 136B, 136C, and 136D.

26. Are your regulations subject to a "Sunset" or equivalent law? If so, explain and include the next expiration date for your regulations.

No

27. Please review and verify that the information in the enclosed State Regulation Status (SRS) sheet is correct. For those regulations that have not been adopted by the State, explain why they were not adopted, and discuss actions being taken to adopt them. If legally binding requirements were used in lieu of regulations and they have not been reviewed by NRC for compatibility, please describe their use.

All required regulations through RATS ID 2019-2 have been adopted. RATS ID 2020-1 is due for state adoption 6-16-2023; 2020-2 is due 8-17-2023; 2020-3 is due 11-16-2023; 2021-1 is due 9-8-2024; and 2021-2 is due 12-30-2024. All these items will be addressed during rule making set to occur during the winter of 2022.

28. If you have not adopted all amendments within three years from the date of NRC rule promulgation, briefly describe your State's procedures for amending regulations in order to maintain compatibility with the NRC, showing the normal length of time anticipated to complete each step.

Not applicable.

II. Sealed Source and Device (SS&D) Evaluation Program

This section is not applicable to the Iowa Agreement State Program.

29. Prepare a table listing new and amended (including transfers to inactive status) SS&D registrations of sources and devices issued during the review period. The table heading should be:

<u>SS&D Registry Number</u>	<u>Manufacturer, Distributor or Custom User</u>	<u>Product Type or Use</u>	<u>Date Issued</u>	<u>Type of Action</u>
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30. Please include information on the following questions in Section A, as they apply to the SS&D Program:

Technical Staffing and Training - Questions 2-9
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

III. Low-level Radioactive Waste Disposal Program

This section is not applicable to the Iowa Agreement State Program.

31. Please include information on the following questions in Section A, as they apply to the Low-Level Radioactive Waste Disposal Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

IV. Uranium Recovery Program

This section is not applicable to the Iowa Agreement State Program.

32. Please include information on the following questions in Section A, as they apply to the Uranium Recovery Program:

Technical Staffing and Training - Questions 2-9
Status of Materials Inspection Program - Questions 10-14
Technical Quality of Inspections - Questions 15-17
Technical Quality of Licensing Actions - Questions 18-22
Technical Quality of Incident and Allegation Activities - Questions 23-24

COVID-19 Impact/Adjustment Notes

Industrial Radiographers Exam/Certification:

<https://idph.iowa.gov/Portals/1/userfiles/124/IRcertGuidanceRev2.pdf>

- Automatic 6 month extension for anyone who had a card expiring between March 1 and September 30, 2020.
- Recognition of other certifying entities (other CRCPD members, ASNT, etc) in accordance with the issuing authority, up to 12 months.

Regulatory Relief:

Other than IR noted above, no other regulatory relief was broadly issued. For medical, we required QA/QC on dose calibrators if seeing patients. For all, calibrations of meters were required to be maintained.

License renewals:

Due to increased fees and some licensees loss of Exempt Fee status, several entities were terminating their license. However, due to COVID, waste disposal services had halted their rounds to pick up waste. These licensees may have had an extended Deemed Timely period (by Iowa standards)

Due to remote work starting in March 2020 (COVID), license issuance is single signature only.

Inspections Impact

Note: 1 of the inspectors had prolonged leave of absence summer of 2020 through Summer of 2021)

- All should be performed within NRC (2800 Inspection Manual) frequencies/priorities. License categories where the State of Iowa inspects at a higher frequency than the NRC was relaxed to NRC (2800) requirements to mitigate shortened inspection season and loss of one inspector.
 - These categories are as follows: AAB, MD, HDR, RD2, NV, PET, NP
- FG, where there is not a real "performance based" inspection ability, was authorized for remote inspection only.
- 2020 Inspections were executed as "Announced", in order to assure both licensee and inspector had appropriate PPE for inspection.
- 3 of 2020 inspections were executed prior to COVID (as unannounced, and in IA periodicity)
- Exit briefs: If proper social distancing could not be established, exit briefs were conducted via teleconference (audio and/or video).
- No supervisory inspector accompaniments were performed in 2020.
 - No accompaniment in 2021 for the inspector who was on prolonged leave; Senior Health Physicist conducted accompaniment upon his resumption of duties.